

# **A Michigan Science Teachers Association Position Statement**

**October, 2005**

## **The Teaching of Evolution and Global Warming Michigan House of Representatives Bill #5251 (2005)**

Michigan House of Representatives Bill #5251 (2005) would require the amendment of "The Revised School Code" (PA 451, 1976; Sect. 1278 (MCL 380.1278)) in order to "...*revise the recommended model core academic curriculum content standards in science to ensure that pupils will be able to do the following: a) use the scientific method to critically evaluate scientific theories including, but not limited to, the theories of global warming and evolution b) use relevant scientific data to assess the validity of those theories and to formulate arguments for or against those theories.*"

Whereas the Michigan Department of Education's (MDOE) "Content Standards and Benchmarks for Science Education" (1995, 2002) already require students to "*use scientific knowledge to make decisions about real-world problems*" and to be "*able to make informed judgments on statements and debates claiming to have a scientific basis*", the Michigan Science Teachers Association (MSTA) can identify no valid reason for legislative intervention that would modify the existing standards as developed and adopted by the MDOE working in collaboration with Michigan's professional science education community.

Whereas global warming and evolution are the only two theories selected for mandatory "critical evaluation" in HB 5251, it is the position of the MSTA that this requirement is inappropriate both pedagogically and scientifically. If the true academic and pedagogical intent of HB 5251 is to teach the critical evaluation of scientific theory, it is the position of the MSTA that global warming and evolution should not be isolated for mandatory student review. A legislative mandate that includes only evolution and global warming in such an evaluation may suggest to students and the public that these theories are somehow less robust or less scientific than are other scientific theories that were not selected for mandatory evaluation e.g., plate tectonics, atomic theory, cell theory, relativity. Such inference would be in clear contrast to the preponderance of scientific evidence supporting both of these theories and would represent a dishonest and unprofessional approach to the sciences and science education in Michigan.

In adopting the position statement of the National Science Teachers Association (1997) regarding the teaching of evolution, The Michigan Science Teachers Association supports the position that evolution is a major unifying concept of science and should be included as part of K-College science frameworks and curricula. The MSTA recognizes that evolution has not been emphasized in science curricula in a manner commensurate to its importance because of official policies, intimidation of science teachers and the general public's misunderstanding of evolutionary theory and the nature of science in general.

Furthermore, the MSTA recognizes that science teachers may feel pressured to modify or eliminate their presentation of scientific topics that may have socio-political or economic implications e.g., evolution, global warming, stem-cell research and cloning.

In recognition of the aforementioned, it is the position of the Michigan Science Teachers Association that HB 5251 be removed from any further consideration by the Michigan House of Representatives.

**HB 5251 Sponsors:** John Moolenaar (Primary Sponsor), Brian Palmer, Jim Plakas, Scott Hummel, Judy Emmons, Joel Sheltrown, John Stahl, John Gleason, Rick Baxter, Roger Kahn, Gary Newell, Richard Ball, Fulton Sheen, Shelley Taub, Michael Sak, David Farhat, Robert Gosselin, Jacob Hoogendyk, Howard Walker, Tom Pearce.